# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start		Rating **	Α	Issue No.		1	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				٥		0
DWR ID DWR_MA0013_01_s _ 2013_1							
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
The LMA h	nas the O8	M manuals.					

No Photos

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item		Emergency Supplies &		0			0
Item	Equipmer	nt			0		0
DWR ID	DWR_MAG	013_01_s _ 201	3_8				
		Comn	nent Cod	de			

Inspector Comment

The LMA has adequate flood fight supplies and equipment.

No Photos

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	Levee GPS Latitude/Longi		le/Longitude			
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
петт					0		0

No Photos

DWR\_MA0013\_01\_s \_ 2013\_16 Comment Code

Inspector Comment

The LMA completed flood fight training in 2018.

Location LS : Land Side N/A : Not Applicable WS: Water Side CR : Crown

Rating A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.13	Rating **	A/W	Issue No.		92
LM End	1.13	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	39.5821	47°	39.582147°
пеш				-121.7005	40°	-121.700540 °
DWR ID	16343					

# Inspector Comment

Comment Code

FS\_ID:52180 DS\_ID:16343 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the

crossing.
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on

both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

 LM Start
 1.13
 Rating \*\*
 A/W
 Issue No.
 92 (cont)

 LM End
 1.13
 Issue Type +
 Ma
 Location \*

#### Photo 1 of 3: UCIP\_SP\_2019\_52180\_66689.jpg



Overview of levee crown at crossing looking D/S.

#### Photo 2 of 3: UCIP\_SP\_2019\_52180\_66688.jpg



View of WS headwall and flap gate.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.13	Rating **	A/W	Issue No.		92 (cont)
LM End	1.13	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.58214	7°	39.582147 °
пеш				-121.70054	0°	-121.700540 °
DWR ID	16343					

### Inspector Comment

Comment Code

FS\_ID:52180 DS\_ID:16343 EP\_NO: N/A

crossing.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]

FS Date: 6/16/2017 10:11:43 AM

#### Photo 3 of 3: UCIP\_SP\_2019\_52180\_66687.jpg



View of WS with pipe in channel.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.59	Rating **	М	Issue No.		93
LM End	1.59	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.57688	33 °	39.576883 °
пеш				-121.7027	70°	-121.702770 °
DWR ID	16831					

# Comment Code

#### Inspector Comment

FS\_ID:52938 DS\_ID:16831 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be. Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 8/23/2018 1:54:26 PM



Overview of levee crown at crossing looking downstream.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.59	Rating **	М	Issue No.		93 (cont)
LM End	1.59	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.57688	3°	39.576883 °
Item				-121.70277	o°	-121.702770 °
DWR ID	16831					

# Comment Code

#### Inspector Comment

FS\_ID:52938 DS\_ID:16831 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be. Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

FS Date: 8/23/2018 1:54:26 PM



Corrugated metal riser with slide gate located on WS slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.59	Rating **	М	Issue No.		93 (cont)
LM End	1.59	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.57688	3°	39.576883 °
Item				-121.70277	o°	-121.702770 °
DWR ID	16831					

### Comment Code

#### Inspector Comment

FS\_ID:52938 DS\_ID:16831 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/23/2018 1:54:26 PM

UCIP Comments: 8/23/2018 Same as last inspection; still no sign of WS pipe end. Unclear if this SD crossing is still in use. The WS toe has standing, mucky, water around where the pipe end should be. Downgrading to Non-Urgent from Urgent because there appears no immediate threat to levee. Recommend follow up with owner to determine pipe use, and an internal pipe inspection to determine pipe integrity and threat to levee (D. Sanoski - DWR UCIP).6/14/2017 Still no sign of WS pipe end. Pipe may need to be traced with GPR and excavated to determine if the WS end was properly capped after the Headwall and pipe sections were removed. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)

4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]

Photo 3 of 3: UCIP\_SP\_2019\_52938\_66698.jpg



WS headwall, rock protection, and outlet blocked by shrub.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.73	Rating **	М	Issue No.		13			
LM End	1.73	Issue Type +	Ma	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item		rface / Depres	ssions /	39.5747	'62 °	39.574762°			
пеш	Rutting			-121.7031	45 °	-121.703145°			
DWR ID	DWR_MA0	013_01_s _ 201	9_13						
		Comn	nent Cod	le					
C2 : Repai	r depressi	ons or ruts in	the crow	n or slope.					
		Inspecto	or Comm	nent					

No Photos

LM Start	2.70	Rating **	A/W	Issue No.		Issue No.		96
LM End	2.70	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	IP LMA Respo	onsibility	39.56113	80°	39.561130 °		
пеш				-121.70514	° 04	-121.705140 °		
DWR ID	16347							

#### Comment Code

#### Inspector Comment

FS\_ID:52185 DS\_ID:16347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE\_CESPK\_M13D\_2011\_p\_0130 for WS flap gate closed and blocked by sediment.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

#### Photo 1 of 3: UCIP\_SP\_2019\_52185\_66715.jpg



Overview of levee crown looking downstream at crossing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.70	Rating **	A/W	Issue No.		96 (cont)
LM End	2.70	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.56113	o°	39.561130°
пеш				-121.70514	o°	-121.705140°
DWR ID	16347					

# Inspector Comment

Comment Code

FS\_ID:52185 DS\_ID:16347 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition. 7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect

ID#USACE\_CESPK\_M13D\_2011\_p\_0130 for WS flap gate closed and blocked by sediment.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)]

FS Date: 6/16/2017 12:27:02 PM

LM Start	2.70	Rating **	A/W	Issue No.	96 (cont)
LM End	2.70	Issue Type +	Ma	Location *	



Flap gate at WS.

#### Photo 3 of 3: UCIP\_SP\_2019\_52185\_66711.jpg



View of channel.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.05	Rating **	М	Issue No.		97	
LM End	3.05	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5563 <sup>-</sup>	10°	39.556310°	
пеш			-121.7064	70°	-121.706470 °		
DWR ID	17372						

# Inspector Comment

Comment Code

FS\_ID:52186 DS\_ID:17372 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

# Photo 1 of 3: UCIP\_SP\_2019\_52186\_66718.jpg



Overview of levee crown looking downstream at crossing.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.05	Rating **	М	Issue No.		97 (cont)
LM End	3.05	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.5563	10°	39.556310°
Item				-121.7064	70 °	-121.706470 °
DWR ID	17372					

# Comment Code

#### Inspector Comment

FS\_ID:52186 DS\_ID:17372 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM

Photo 2 of 3: UCIP\_SP\_2019\_52186\_66716.jpg



WS levee slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.05	Rating **	М	Issue No.		97 (cont)	
LM End	3.05	Issue Type +	Ma	Location *			
Catagony	Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.55631	o°	39.556310 °	
пеш				-121.70647	o°	-121.706470 °	
DWR ID	17372						

# Inspector Comment

Comment Code

FS\_ID:52186 DS\_ID:17372 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flap gate is completely buried by sediment- needs to be dug out. Pipe is about 50% full of sediment inside. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard-

AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that dicharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0157 for WS and LS inlet/outlet blocked by sediment.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flap gate is located on the waterside (WS). Concrete headwall located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]

FS Date: 6/16/2017 12:28:31 PM



Flap gate on waterside.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.24	Rating **	М	Issue No.		99	
LM End	3.24	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UC	IP LMA Respo	nsibility	39.55349	0°	39.553490°	
Item			-121.70668	0°	-121.706680 °		
DWR ID	16349						

# Comment Code

#### Inspector Comment

FS\_ID:52188 DS\_ID:16349 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

LM Start	3.24	Rating **	М	Issue No.	99 (cont)
LM End	3.24	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_52188\_66725.jpg



Overview of levee crown looking DS at crossing.

#### Photo 2 of 3: UCIP SP 2019 52188 66724.jpg



Flap gate on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.24	Rating **	М	Issue No.		99 (cont)		
LM End	3.24	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory		Start		End				
Item	DWR UC	IP LMA Respo	nsibility	39.55349	90°	39.553490°		
пеш			-121.706680 °		-121.706680 °			
DWR ID	16349							
Comment Code								

#### Inspector Comment

FS\_ID:52188 DS\_ID:16349 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends and gates are mostly buried- need to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 6/16/2017 12:31:09 PM

Photo 3 of 3: UCIP\_SP\_2019\_52188\_66726.jpg



Recent sediment removal on WS.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.27	Rating **	A/W	Issue No.		Issue No.		100
LM End	3.27	Issue Type +	Ма	Location *				
Catagony	Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP LMA Responsibility			39.55312	29°	39.553129°		
item			-121.7066	40 °	-121.706640 °			
DWR ID	16350							

# Comment Code

#### Inspector Comment

FS\_ID:52189 DS\_ID:16350 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dud out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-

AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)]

FS Date: 6/16/2017 12:32:19 PM

LM Start	3.27	Rating **	A/W	Issue No.	100 (cont)
LM End	3.27	Issue Type +	Ma	Location *	



Overview of levee crown at crossing.

#### Photo 2 of 3: UCIP\_SP\_2019\_52189\_66730.jpg



View of WS flap gate.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.27	Rating **	A/W	Issue No.		100 (cont)
LM End	3.27	Issue Type +	Ма	Location *		
Category	Suppleme	Supplemental				le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.55312	9°	39.553129°
пеш				-121.70664	0°	-121.706640 °
DWR ID	16350					

#### Comment Code

#### Inspector Comment

FS\_ID:52189 DS\_ID:16350 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

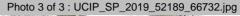
UCIP Comments: 6/14/2017 WS flapgate is buried by sediment- needs to be dug out. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-

AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)]

FS Date: 6/16/2017 12:32:19 PM





Sedimentation cleared on WS.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.72	Rating **	A/W	Issue No.		101
LM End	3.72	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5465	92 °	39.546592 °
пеш				-121.7075	60°	-121.707560 °
DWR ID	16351					

# Inspector Comment

Comment Code

FS\_ID:52190 DS\_ID:16351

EP\_NO: N/A Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM

LM Start	3.72	Rating **	A/W	Issue No.	101 (cont)
LM End	3.72	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52190\_66738.jpg



WS slope covered by dense vegetation.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.72	Rating **	A/W	Issue No.		101 (cont)
LM End	3.72	Issue Type +	Ма	Location *		
Category	Suppleme	Supplemental				e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.54659	92 °	39.546592 °
пеш				-121.70756	60°	-121.707560 °
DWR ID	16351					

# Comment Code

#### Inspector Comment

FS\_ID:52190 DS\_ID:16351 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Both pipe ends were underwater during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 6/16/2017 12:33:16 PM



WS flap gate

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.74	Rating **	М	Issue No.		102
LM End	3.74	Issue Type +	Ма	Location *		
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5463	17°	39.546317°
пеш				-121.7075	10°	-121.707510 °
DWR ID	16365					

# Comment Code

#### Inspector Comment

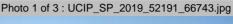
FS\_ID:52191 DS\_ID:16365 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard-AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 6/16/2017 12:35:50 PM

LM Start	3.74	Rating **	М	Issue No.	102 (cont)
LM End	3.74	Issue Type +	Ма	Location *	





Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP\_SP\_2019\_52191\_66741.jpg



WS flap gate blocked by debris.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.74	Rating **	М	Issue No.		102 (cont)
LM End	3.74	Issue Type +	Ма	Location *		
Category	Suppleme	Supplemental				e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.5463	17°	39.546317°
пеш				-121.7075	10°	-121.707510 °
DWR ID	16365					

# Comment Code

#### Inspector Comment

FS ID:52191 DS\_ID:16365 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Appears abandoned- needs to be done properly. WS gate was buried/submerged and the LS slide gate is still damaged and buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard- AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried.7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)]

FS Date: 6/16/2017 12:35:50 PM



LS slide gate covered with silt. Slide gate is bent.

LM Start	3.79	Rating **	U	Issue No.		75
LM End	15.81	Issue Type +	Ма	Location *	LS	
Category	Earthen Levee GPS Latitu			titud	e/Longitude	
Category				Start		End
Item	Vegetatio	n		39.54559	0°	39.398277°
пеш				-121.70738	2 °	-121.811794°
DWR ID	R ID DWR_MA0013_01_s _ 2019_75					

#### Comment Code V1 : Control annual grass and weeds on the levee slopes and easements

# Inspector Comment

#### Photo 1 of 1: SP\_2019\_MA0013\_300\_75\_20190520\_00145.jpg



View of the vegetation on the landside slope. Spring 2019.

Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	
CR · Crown	

Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

+ Issue Type Ma: Maintenance Deficiancy Ob: Design & System Obsolescence

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.79	Rating **	U	Issue No.		74			
LM End	18.50	Issue Type +	Ма	Location *	WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Vegetation				39.5455	89°	39.373436°			
пеш				-121.707384° -121.85043					
DWR ID	DWR_MA0	013_01_s _ 201	9_74						
		Comn	nent Cod	le					
V1 : Contre		grass and wee	ds on th	e levee slo	pes a	and			
Inspector Comment									



View of the vegetation on the waterside slope. Spring 2019.

LM Start	4.35	Rating **	A/W	Issue No.		Issue No.		103
LM End	4.35	Issue Type +	Ma	Location *				
Category	Suppleme	ental		GPS La	titud	e/Longitude		
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.5375	16°	39.537516°		
пеш				-121.7075	80°	-121.707580 °		
DWR ID	16341							

#### Comment Code

#### Inspector Comment

FS\_ID:52193 DS\_ID:16341 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0189 for sediment and grass blocking WS and LS.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

#### Photo 1 of 3: UCIP\_SP\_2019\_52193\_66752.jpg



Overview of levee crown at crossing looking upstream.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.35	Rating **	A/W	Issue No.		Issue No.		Issue No.		103 (cont)
LM End	4.35	Issue Type +	Ma	Location *						
Category	ental	GPS Latitude/Longitude								
Calegory				Start		End				
Item	DWR UCI	P LMA Respo	onsibility	39.53751	6°	39.537516°				
пеш				-121.70758	0°	-121.707580 °				
DWR ID	16341									

#### Inspector Comment

Comment Code

FS\_ID:52193 DS\_ID:16341 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is shut but blocked by sediment- needs to be dug out. LS slide gate has some minor sediment built up against it. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0189 for sediment and grass blocking WS and LS.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)] FS Date: 6/16/2017 12:52:19 PM

LM Start	4.35	Rating **	A/W	Issue No.	103 (cont)
LM End	4 35	Issue Type +	Ma	Location *	





View of WS slope and toe.

#### Photo 3 of 3: UCIP\_SP\_2019\_52193\_66750.jpg



View of WS.

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiancy N: Not Inspected/Rated A : Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.85	Rating **	A/W	Issue No.		104
LM End	4.85	Issue Type +	Ма	Location *		
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.53022	0°	39.530220°
пеш				-121.70794	0°	-121.707940°
DWR ID	16355					

# Comment Code

#### Inspector Comment

FS\_ID:52194 DS\_ID:16355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)] FS Date: 6/16/2017 12:55:37 PM

LM Start	4.85	Rating **	A/W	Issue No.	104 (cont)
LM End	4.85	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_52194\_66756.jpg



Overview of levee crown at crossing looking downstream at righ bank of Cherokee Canal.

#### Photo 2 of 3: UCIP\_SP\_2019\_52194\_66758.jpg



Burrow activity on WS slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.85	Rating **	A/W	Issue No.		104 (cont)	
LM End	4.85	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.53022	0 °	39.530220 °	
пеш				-121.70794	0 °	-121.707940 °	
DWR ID	16355						

#### Comment Code

#### Inspector Comment

FS\_ID:52194 DS\_ID:16355 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is submerged and appears to be half buried by sediment. LS slide gate is fully submerged on the edge of the rice field. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]

FS Date: 6/16/2017 12:55:37 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52194\_66755.jpg



View of WS flap gate.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.33	Rating **	A/W	Issue No.		105	
LM End	5.33	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.52323	36°	39.523236°	
пеш				-121.7076	50°	-121.707650 °	
DWR ID 16356							
Comment Code							

# Inspector Comment

FS ID:52195 DS\_ID:16356 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0204 for restriction view of gates. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)] FS Date: 6/16/2017 1:04:28 PM



#### Photo 1 of 3: UCIP\_SP\_2019\_52195\_66762.jpg



Overview of levee crown at crossing looking D/S on right bank of Cherokee Canal.

#### Photo 2 of 3: UCIP\_SP\_2019\_52195\_66760.jpg



WS Flap Gate

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiancy N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.33	Rating **	A/W	Issue No.		105 (cont)
LM End	5.33	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52323	6°	39.523236°
пеш				-121.70765	0°	-121.707650 °
DWR ID	16356					

# Comment Code

#### Inspector Comment

FS ID:52195 DS\_ID:16356 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good conditio. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears

to be in good condition.5/21/2014 Same as last

inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0204 for restriction view of gates. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]

FS Date: 6/16/2017 1:04:28 PM

#### Photo 3 of 3: UCIP\_SP\_2019\_52195\_66763.jpg



WS view of outlet cleared of vegetation.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.38	Rating **	М	Issue No.		106		
LM End	5.38	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory		Start		End				
Item	DWR UCIP LMA Responsibility			39.52256	66°	39.522566 °		
пеш			-121.70756	60°	-121.707560 °			
DWR ID	16357							

# Comment Code

#### Inspector Comment

FS\_ID:52196 DS\_ID:16357 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.48)]

FS Date: 6/16/2017 1:05:09 PM

LM Start	5.38	Rating **	М	Issue No.	106 (cont)
LM End	5.38	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_52196\_66764.jpg



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP SP 2019 52196 66765.jpg



View of WS slope and channel.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.38	Rating **	М	Issue No.		106 (cont)
LM End	5.38	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.52256	6°	39.522566 °
item	item			-121.70756	o°	-121.707560 °
DWR ID	16357					

# Comment Code

#### Inspector Comment

FS\_ID:52196 DS\_ID:16357 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS flapgate is partially buried by sediment- needs to be dug out. LS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.48)] FS Date: 6/16/2017 1:05:09 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52196\_66768.jpg



View of WS flap gate.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.63	Rating ** M		Issue No.		107
LM End	5.63	Issue Type +	Ма	Location *		
Category	Supplemental Supplemental				titud	le/Longitude
Calegory		Start		End		
Item	DWR UC	39.5192	12°	39.519212°		
пеш		-121.7090	30°	-121.709030 °		
DWR ID	16359					

# Comment Code

#### Inspector Comment

FS\_ID:52201 DS\_ID:16359 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13D\_2011\_p\_0210 for WS gate submerged. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]

FS Date: 6/16/2017 1:29:37 PM

LM Start	5.63	Rating **	М	Issue No.	107 (cont)
LM End	5.63	Issue Type +	Ma	Location *	





Overview of levee crown at crossing looking downstream.

Photo 2 of 3: UCIP\_SP\_2019\_52201\_66794.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.63	Rating **	М	Issue No.		107 (cont)
LM End	5.63	Issue Type +	Ма	Location *		
Category	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.51921	2°	39.519212 °
пеш				-121.70903	0 °	-121.709030 °
DWR ID	16359					

# Inspector Comment

Comment Code

FS\_ID:52201 DS\_ID:16359 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS Flap gate is completely buried- needs to be dug out. LS is blocked off by flashboards that are partially buried. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS still completely buried. (DWR Sutter Yard- AFreitag)4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13D\_2011\_p\_0210 for WS gate submerged. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.73)] FS Date: 6/16/2017 1:29:37 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52201\_66791.jpg



View of WS flap gate buried.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.87	Rating **	A/W	Issue No.		108	
LM End	5.87	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.5160	59°	39.516059°	
пеш				-121.7108	10°	-121.710810 °	
DWR ID	16360						
Comment Code							

### Inspector Comment

FS\_ID:52202 DS\_ID:16360 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM

LM Start	5.87	Rating **	A/W	Issue No.	108 (cont)
LM End	5.87	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_SP\_2019\_52202\_66800.jpg



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52202\_66801.jpg



View of WS slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.87	Rating **	A/W	Issue No.		Issue No.		108 (cont)
LM End	5.87	Issue Type +	Ма	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	DWR UCIP LMA Responsibility			59°	39.516059°		
пеш			-121.710810 °		-121.710810 °			
DWR ID	16360							

# Comment Code Inspector Comment

FS\_ID:52202 DS\_ID:16360 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. LS is completely submerged in an irrigation ditch. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 6/16/2017 1:49:28 PM



Flap gate WS

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	6.23	Rating **	М	Issue No.		109
LM End	6.23	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.51133	7°	39.511337°
Item				-121.71362	0°	-121.713620 °
DWR ID	16361					

#### Comment Code

#### Inspector Comment

FS\_ID:52203 DS\_ID:16361 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM

LM Start	6.23	Rating **	М	Issue No.	109 (cont)
LM End	6.23	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52203\_66806.jpg



View of WS slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	6.23	Rating **	М	Issue No.		109 (cont)
LM End	6.23	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.51133	37°	39.511337°
пеш				-121.71362	° 02	-121.713620 °
DWR ID	16361					

# Inspector Comment

Comment Code

FS\_ID:52203 DS\_ID:16361 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 WS appears to be in good condition. LS slide gate is buried and submerged. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]

FS Date: 6/16/2017 1:51:41 PM



View of WS flap gate.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	6.99	Rating **	М	Issue No.		110
LM End	6.99	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	egory			Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.50147	9°	39.501479°
пеш				-121.71971	0°	-121.719710 °
DWR ID	16329					

# Comment Code

#### Inspector Comment

FS\_ID:52211 DS\_ID:16329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM

LM Start	6.99	Rating **	М	Issue No.	110 (cont)
LM End	6.99	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_SP\_2019\_52211\_66833.jpg



Overview of levee crown at crossing looking D/S.

#### Photo 2 of 3: UCIP\_SP\_2019\_52211\_66832.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	6.99	Rating **	М	Issue No.		110 (cont)	
LM End	6.99	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory	ory			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.50147	9°	39.501479	0
пеш					°	-121.719710	0
DWR ID	16329						

#### Inspector Comment

Comment Code

FS\_ID:52211 DS\_ID:16329 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate is still damaged and needing to be replaced. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- AFreitag)4/28/2016 LS slide gate is still bent. Everyhting else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 6/19/2017 10:17:38 AM



WS Flap Gate

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.22	Rating **	М	Issue No.	111		
LM End	7.22	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start Er			
Item	DWR UCIP LMA Responsibility			39.49884	۱5°	39.498845 °	
пеш				-121.7224	° Ol	-121.722440 °	
DWR ID	DWR ID 16354						
Comment Code							

# Inspector Comment

FS\_ID:52212 DS\_ID:16354 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0244 for submerged WS gate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 1 of 3: UCIP\_SP\_2019\_52212\_66844.jpg



Overview of levee crown at crossing looking D/S.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.22	Rating **	М	Issue No.	111 (cont		
LM End	7.22	Issue Type +	Ма	Location *			
Category	GPS Latitude/Longitude						
Calegory	zategory					End	
Item	DWR UC	IP LMA Respo	nsibility	39.49884	5°	39.498845	
пеш				-121.72244	0°	-121.722440	
DWR ID 16354							
Comment Code							

### Inspector Comment

FS\_ID:52212 DS\_ID:16354 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0244 for submerged WS gate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

## Photo 2 of 3: UCIP\_SP\_2019\_52212\_66845.jpg



View of WS slope and toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.22	Rating **	М	Issue No.		111 (cont)
LM End	7.22	7.22 Issue Type + Ma Location		Location *		
Category	Supplemental				titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4988	45 °	39.498845 °
пеш				-121.7224	40 °	-121.722440 °
DWR ID	16354					

## Comment Code

#### Inspector Comment

FS\_ID:52212 DS\_ID:16354 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 LS slide gate stem still bent. WS appeared to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Screw gate stem bent but gate is still operational. (DWR Sutter Yard- AFreitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0244 for submerged WS gate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 6/19/2017 10:19:12 AM

Photo 3 of 3: UCIP\_SP\_2019\_52212\_66842.jpg



WS Flap Gate

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.46	Rating **	A/W	Issue No.	112			
LM End	7.46	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.49614	l6°	39.496146°		
пеш				-121.72516	° 0	-121.725160°		
DWR ID	DWR ID 16352							
Comment Code								

## Inspector Comment

FS\_ID:52213 DS\_ID:16352 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont)
LM End	7.46	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2019\_52213\_66853.jpg



View of levee crown at crossing looking D/S.

#### Photo 2 of 3: UCIP SP 2019 52213 66851.jpg



WS view of slope and channel.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont			
LM End	7.46	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	alegory					End		
Item	DWR UC	IP LMA Respo	nsibility	39.49614	l6°	39.496146 °		
пеш				-121.72516	° 0	-121.725160 °		
DWR ID	R ID 16352							
Comment Code								

#### Inspector Comment

FS\_ID:52213 DS\_ID:16352 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)] FS Date: 6/19/2017 10:29:30 AM

Photo 3 of 3 : UCIP\_SP\_2019\_52213\_66849.jpg



View of WS flap gate. Dense vegetation on WS slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.64	Rating **	A/W	Issue No.		113
LM End	7.64	Issue Type + Ma		Location *		
Category	Suppleme	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4937	56°	39.493756°
пеш			-121.72657	70°	-121.726570 °	
DWR ID	16320					

## Comment Code

#### Inspector Comment

FS\_ID:52217 DS\_ID:16320 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.76)]

FS Date: 6/19/2017 12:43:02 PM

LM Start	7.64	Rating **	A/W	Issue No.	113 (cont)
LM End	7.64	Issue Type +	Ma	Location *	



Overview of levee crown at crossing (past gate) looking D/S.

#### Photo 2 of 3: UCIP\_SP\_2019\_52217\_66865.jpg



View of WS slope, corrugated metal riser with slide gate.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	7.64	Rating **	A/W	Issue No.		113 (cont)	
LM End	7.64	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UCIP LMA Responsibility			39.49375	o°	39.493756 °	
пеш				-121.72657	°	-121.726570 °	
DWR ID	16320						

## Comment Code

#### Inspector Comment

FS\_ID:52217 DS\_ID:16320 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Debris down inside of WS riser. The rest of the crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.76)]

FS Date: 6/19/2017 12:43:02 PM



* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown	II · I Inaccentable	A/W · Accentable but Monitor & Maintain	En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.00	Rating **	A/W	Issue No.		114		
LM End	8.00	Issue Type +	Ма	Location *				
Category	Supplemental Supplemental				GPS Latitude/Longitude			
Calegory	Calegory					End		
Item	DWR UC	DWR UCIP LMA Responsibility			°	39.489061 °		
пеш				-121.729430	°	-121.729430°		
DWR ID	16321							

### Inspector Comment

Comment Code

FS\_ID:52218 DS\_ID:16321 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM

LM Start	8.00	Rating **	A/W	Issue No.	114 (cont)
LM End	8.00	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP\_SP\_2019\_52218\_66872.jpg



Overview of levee crown at crossing looking D/S.

#### Photo 2 of 3: UCIP\_SP\_2019\_52218\_66873.jpg



View of WS slope and toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.00	Rating **	A/W	Issue No.	114 (cont)	
LM End	8.00	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory	Category			Start		End
Item	DWR UCIP LMA Responsibility			39.48906	°	39.489061 °
пеш				-121.729430	°	-121.729430 °
DWR ID	16321					

### Inspector Comment

Comment Code

FS\_ID:52218 DS\_ID:16321 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

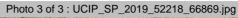
AFreitag)4/28/2016 Crossing appears to be in good

condition.7/13/2015 Crossing appears to be in good condition.

5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)]

FS Date: 6/19/2017 12:45:23 PM





WS Flap gate

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.27	Rating **	М	Issue No.		115		
LM End	8.27	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Calegory					End		
Item	DWR UCIP LMA Responsibility			39.48543	32°	39.485432 °		
пеш				-121.73159	00°	-121.731590 °		
DWR ID	16322							

## Inspector Comment

Comment Code

FS\_ID:52219 DS\_ID:16322 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

LM Start	8.27	Rating **	М	Issue No.	115 (cont)
LM End	8.27	Issue Type +	Ma	Location *	

## Photo 1 of 3 : UCIP\_SP\_2019\_52219\_66876.jpg



Overview of levee crown at crossing looking D/S.

#### Photo 2 of 3: UCIP\_SP\_2019\_52219\_66874.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.27	Rating **	М	Issue No.	115 (cont)	
LM End	8.27	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.485432	2°	39.485432
пеш				-121.731590	°	-121.731590
DWR ID	16322					

## Inspector Comment

Comment Code

FS\_ID:52219 DS\_ID:16322 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Both sides of the crossing were buried with sediment- needs to be cleared away. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)]

FS Date: 6/19/2017 12:47:00 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52219\_66877.jpg



View of WS flap gate and headwall.

LM Start	8.60	Rating **	U	Issue No.	76			
LM End	8.60	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Encroach	ments		39.48112	23 °	39.481123 °		
пеш			-121.73410	62 °	-121.734162 °			
DWR ID	DWR_MA0013_01_s _ 2019_76							
Comment Code								

TR: Tree or limb

#### Inspector Comment

The large fallen tree should be removed from the waterside slope.

#### Photo 1 of 1: SP\_2019\_MA0013\_300\_76\_20190520\_00146.jpg



View of the large fallen tree on the waterside slope. Spring 2019.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.81	Rating **	М	Issue No.		49		
LM End	8.81	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory			Start		End			
Item	Erosion /	39.4786	648°	39.478648 °				
item				-121.736477 °		-121.736477 °		
DWR ID DWR_MA0013_01_f _ 2016_49								
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	tion.		
Inspector Comment								

noto 1 of 1 : SP_201	19_MA0013_300_4	19_20190327_00	0006.jpg
		and so	
		A 42 3	417
	Acres 100	a Probable	
	A TANK	18/06/2011	
September 1997	A STATE OF THE STA	and the state of the	44.00

View of the erosion site along the landside toe.

LM Start	8.84	Rating **	М	Issue No.		117
LM End	8.84	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.47828	1°	39.478281 °
пеш				-121.73678	°	-121.736780°
DWR ID	16325					

#### Comment Code

#### Inspector Comment

FS\_ID:52223 DS\_ID:16325 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

#### Photo 1 of 3: UCIP\_SP\_2019\_52223\_66895.jpg



Overview of levee crown at crossing looking D/S.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.84	Rating **	М	Issue No.		117 (cont)		
LM End	8.84	Issue Type +	Ма	Location *				
Category Supplemental				Supplemental GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.4782	81 °	39.478281	0	
пеш		-121.7367	80°	-121.736780	0			
DWR ID	DWR ID 16325							

## Comment Code

#### Inspector Comment

FS\_ID:52223 DS\_ID:16325 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/14/2017 Debris drifts built up around the WS slide gates- needs to be cleared away. LS appears to be n good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last

inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope.

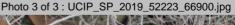
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)]

FS Date: 6/19/2017 12:59:24 PM

LM Start	8.84	Rating **	М	Issue No.	117 (cont)
LM End	8.84	Issue Type +	Ma	Location *	



View of WS slope with 2 slide gates.





View of slide gate on WS. Debris blocking gate.

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiancy N: Not Inspected/Rated : Acceptable Minimally Acceptable WS: Water Side C: Corrected Ob: Design & System Obsolescence CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.95 Rating ** A		A/W	Issue No.		120
LM End	8.95	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
DWR UCIP LMA Responsibility		onsibility	39.47683	39°	39.476839°	
Item				-121.73754	10°	-121.737540 °
DWR ID	16317					

## Inspector Comment

Comment Code

FS\_ID:52227 DS\_ID:16317 EP\_NO: N/A

LM Start

LM End

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE\_CESPK\_M13D\_2011\_p\_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD STRUCT DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM

Photo 1 of	3 : UCIP_SP_	_2019_52227	′_66910.j	pg
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1000				-
	d at			

Overview of levee crown at crossing looking downstream.

## 8.95 Rating \*\* A/W Issue No. 120 (cont) 8.95 Issue Type + Ma Location \*

Photo 2 of 3: UCIP\_SP\_2019\_52227\_66911.jpg



View of WS slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	8.95	Rating **	A/W	Issue No.		120 (cont)
LM End	8.95	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.47683	9°	39.476839°
item				-121.73754	°	-121.737540°
DWR ID	16317					

## Comment Code

#### Inspector Comment

FS\_ID:52227 DS\_ID:16317 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/14/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of

Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE\_CESPK\_M13D\_2011\_p\_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 9.09)] FS Date: 6/19/2017 1:09:21 PM

#### Photo 3 of 3: UCIP\_SP\_2019\_52227\_66912.jpg



View of LS slope and toe.

LM Start	9.70	Rating **	М	Issue No.		5	
LM End	9.72	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thin Trees			39.4671	70°	39.466860	
item				-121.7438	87°	-121.744108	
DWR ID	WR ID DWR_MA0013_01_s _ 2012_5						

#### Comment Code

T1 : Trim trees to at least five feet above ground level.

## Inspector Comment



View of the overgrown trees along the landside slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	9.75	Rating **	М	Issue No.		64
LM End	9.75	Issue Type +	Ma	Location *		LS
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Trim / Thin Trees			39.4664	78°	39.466478°	
пеш			-			-121.744338°
DWR ID	DWR_MA0	013_01_f _ 201	6_64			
		Comn	nent Cod	le		
T1 : Trim t	rees to at l	east five feet	above g	round level.		
		Inspecto	or Comm	nent		

No Photos

LM Start	11.03	Rating **	A/W	Issue No.		121
LM End	11.03	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lati	tuc	le/Longitude
Category				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.44988	°	39.449886°
item				-121.755050	°	-121.755050 °
DWR ID	16332					

## Comment Code

#### Inspector Comment

FS\_ID:52232 DS\_ID:16332 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

FS Date: 6/19/2017 1:17:54 PM

#### Photo 1 of 3: UCIP\_SP\_2019\_52232\_66926.jpg



View of WS corrugated metal riser and concrete wall.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	11.03	Rating **	A/W	Issue No.		121 (cont)	
LM End	11.03	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCIP LMA Responsibility			39.44988	3°	39.449886	0
пеш				-121.75505	°	-121.755050	0
DWR ID	16332						

## Inspector Comment

Comment Code

FS\_ID:52232 DS\_ID:16332 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/16/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.

FIELD STRUCT\_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)]

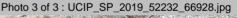
FS Date: 6/19/2017 1:17:54 PM

LM Start	11.03	Rating **	A/W	Issue No.	121 (cont)
LM End	11.03	Issue Type +	Ma	Location *	





Corrugated metal riser with owner information.





Trash rack on WS headwall.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	11.58	Rating **	A/W	Issue No.	4		
LM End	11.59	Issue Type +	Ma	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item		ACE Erosion S	Survey,	39.44282	1°	39.442738 °	
пеш	DRAFT			-121.75985	1°	-121.759908 °	
DWR ID	DWR_MA0013_01_s _ 2016_4						
	Comment Code						

### Inspector Comment

2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK\_11-7\_R]

No Photos

LM Start	11.60	Rating **	A/W	Issue No.		122
LM End	11.60	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.44263	9°	39.442639 °
item				-121.76007	o°	-121.760070 °
DWR ID	16333					

#### Comment Code

#### Inspector Comment

FS\_ID:52233 DS\_ID:16333 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as

Inspection.12/3/2013 Same as last inspection. //15/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.78)]

FS Date: 6/19/2017 1:20:52 PM

#### Photo 1 of 3: UCIP\_SP\_2019\_52233\_66934.jpg



Overview of levee crown at crossing looking downstream.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	11.60	Rating **	A/W	Issue No.		122 (cont)
LM End	11.60	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4426	39°	39.442639°
пеш			-121.7600	70°	-121.760070 °	
DWR ID	16333					

## Comment Code

#### Inspector Comment

FS\_ID:52233 DS\_ID:16333 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 11.78)] FS Date: 6/19/2017 1:20:52 PM

LM Start	11.60	Rating **	A/W	Issue No.	122 (cont)
LM End	11 60	Issue Type +	Ma	Location *	

## Photo 2 of 3: UCIP\_SP\_2019\_52233\_66932.jpg



WS slide gate with owner information.

#### Photo 3 of 3: UCIP\_SP\_2019\_52233\_66930.jpg



Trash rack on WS headwall.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.19 Rating **		М	Issue No.		123
LM End	12.19	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.43516	9°	39.435169°
пеш			-121.76529	90°	-121.765290 °	
DWR ID	16334					

## Comment Code

#### Inspector Comment

FS\_ID:52234 DS\_ID:16334 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM

LM Start	12.19	Rating **	М	Issue No.	123 (cont)
LM End	12.19	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2019\_52234\_66940.jpg



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP SP 2019 52234 66936.jpg



View of Ws slope and channel.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.19	Rating **	М	Issue No.	123 (cont)		
LM End	12.19	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.4351	69 °	39.435169	0
пеш				-121.7652	90°	-121.765290	0
DWR ID	16334						
Comment Code							

#### Inspector Comment

FS\_ID:52234 DS\_ID:16334 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 WS pipe end still unknown- try to locate using GPR/ utility locator. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:22:23 PM



Slide gate located on WS slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.19	Rating **	A/W	Issue No.		124	
LM End	12.19	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			2°	39.435152 °	
пеш				-121.76530	00°	-121.765300 °	
DWR ID	16335						

## Inspector Comment

Comment Code

FS\_ID:52235 DS\_ID:16335 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)]

FS Date: 6/19/2017 1:26:05 PM

LM Start	12.19	Rating **	A/W	Issue No.	124 (cont)
LM End	12.19	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_52235\_66949.jpg



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52235\_66947.jpg



View from levee crown of WS slope and channel.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.19	Rating **	A/W	Issue No.		124 (cont)		
LM End	12.19	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP LMA Respo	nsibility	39.4351	52 °	39.435152°		
пеш				-121.76530	00°	-121.765300°		
DWR ID	16335							
Comment Code								

#### Inspector Comment

FS\_ID:52235 DS\_ID:16335 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 LS slope has been cleared of vegetation and is in good condition.4/18/2012 Limited inspection on LS slope due to dry vegetation. Need photos of cleared LS slope.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 144). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 12.38)] FS Date: 6/19/2017 1:26:05 PM

### Photo 3 of 3: UCIP\_SP\_2019\_52235\_66948.jpg



Water side screw gate located near crown hinge

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.74	Rating **	М	Issue No.		125		
LM End	12.74	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UC	IP LMA Respo	nsibility	39.42807	0°	39.428070 °		
пеш				-121.77008	0°	-121.770080 °		
DWR ID	16336							

## Comment Code

#### Inspector Comment

FS\_ID:52236 DS\_ID:16336 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 6/19/2017 1:28:43 PM

LM Start	12.74	Rating **	М	Issue No.	125 (cont)
LM End	12.74	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2019\_52236\_66952.jpg



Overview picture looking south on right bank of Cherokee Canal.

#### Photo 2 of 3: UCIP\_SP\_2019\_52236\_66959.jpg



View of WS slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.74	Rating **	М	Issue No.		125 (cont)	
LM End	12.74	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory						End	
Item	DWR UC	IP LMA Respo	nsibility	39.42807	°	39.428070 °	
пеш				-121.77008	°	-121.770080 °	
DWR ID	16336						

## Inspector Comment

Comment Code

FS\_ID:52236 DS\_ID:16336 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/19/2017 1:28:43 PM

UCIP Comments: 6/15/2017 Slide gate still missing from inside of WS standpipe. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- AFreitag)4/28/2016 Slide gate was removed from inside the WS standpipe.7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)]

Photo 3 of 3 : UCIP\_SP\_2019\_52236\_66951.jpg



Slide gate located on WS slope. Owner information marked on gate.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.33	Rating **	A/W	Issue No.		127
LM End	13.33	Issue Type +	Ма	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.42066	67°	39.420667 °
пеш				-121.77570	00°	-121.775700 °
DWR ID	16337					

## Comment Code

#### Inspector Comment

FS\_ID:52238 DS\_ID:16337 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM

LM Start	13.33	Rating **	A/W	Issue No.	127 (cont)
LM End	13.33	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52238\_66963.jpg



View of WS slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.33	Rating **	A/W	Issue No.		127 (cont)	
LM End	13.33	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.42066	67°	39.420667	0
пеш				-121.77570	00°	-121.775700	٥
DWR ID	16337						

## Inspector Comment

Comment Code

FS\_ID:52238 DS\_ID:16337 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 6/19/2017 1:33:59 PM

Photo 3 of 3 : UCIP\_SP\_2019\_52238\_66967.jpg



View of WS slope and channel.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.76	Rating **	М	Issue No.		128			
LM End	13.76	Issue Type +	Ма	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.41683	3°	39.416833			
пеш				-121.78193	°	-121.781930			
DWR ID	16338								

## Inspector Comment

Comment Code

FS ID:53315 DS\_ID:16338 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

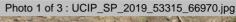
UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed

flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM

Limited inspection on LS due to fallen tree.





WS headwall and flap gate.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.76	Rating **	М	Issue No.		128 (cont)
LM End	13.76	Issue Type +	Ма	Location *		
Category	Suppleme		GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.41683	3°	39.416833°
пеш			-121.78193	0°	-121.781930 °	
DWR ID	16338					

### Inspector Comment

Comment Code

FS\_ID:53315 DS\_ID:16338 EP\_NO: N/A

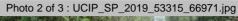
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed

flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM





View of channel at crossing.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.76	Rating **	М	Issue No.		128 (cont)
LM End	13.76	Issue Type +	Ма	Location *		
Category	Supplemental GPS Latitude/Longi				e/Longitude	
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.41683	3°	39.416833 °
пеш				-121.78193	0 °	-121.781930 °
DWR ID	16338					

## Comment Code

#### Inspector Comment

FS\_ID:53315 DS\_ID:16338 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS flapgate has been replaced. LS outlet still has a lot of vegetation, but overall levee integrity looks good at time of this inspection. Downgrading to Non-Urgent from Urgent due to fixed

flapgate and current levee condtion (D. Sanoski - DWR UCIP).6/15/2017 Not abandoned- WS flapgate was dug out and opened draining water from the LS ditch. WS flapgate is heavily corroded and has a broken hinge- needs to be replaced. LS is still very overgrown and needs to be cleared. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)]

FS Date: 8/23/2018 2:42:00 PM

## Photo 3 of 3: UCIP\_SP\_2019\_53315\_66969.jpg



Tree fallen at LS headwall.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	13.77	Rating **	М	Issue No.		129
LM End	13.77	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4167	56°	39.416756 °
пеш					60°	-121.782060 °
DWR ID	16339					

## Comment Code

#### Inspector Comment

FS\_ID:52240 DS\_ID:16339 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Abandoned- still only the structure on the WS shoulder found. (DWR Sutter Yard- AFreitag)11/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Nonfunctional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID#

USACE\_CESPK\_M13D\_2011\_p\_0352 for abandoned gate on WS slope.
FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch steel drainage pipe

through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)]

FS Date: 6/19/2017 1:53:35 PM

LM Start	13.77	Rating **	М	Issue No.	129 (cont)
LM End	13 77	Issue Type +	Ma	Location *	

## Photo 1 of 2: UCIP\_SP\_2019\_52240\_66972.jpg



Buried slide gate on the WS slope.

#### Photo 2 of 2: UCIP SP 2019 52240 66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	14.58	Rating **	U	Issue No.		130
LM End	14.58	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Lati	tud	de/Longitude	
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.40948	°	39.409481 °
пеш				-121.794010	°	-121.794010 °
DWR ID	16368					

## Inspector Comment

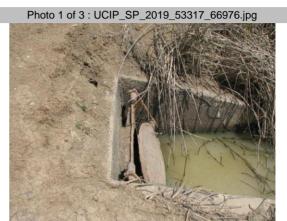
Comment Code

FS\_ID:53317 DS\_ID:16368 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS

end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 8/23/2018 9:14:00 AM



Headwall and flapgate located on water side of levee

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

C: Corrected Ob: Design & System Obsolescence

AW: Acceptable but Monitor & Maintain Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	14.58	Rating **	U	Issue No.		130 (cont)
LM End	14.58	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Lat	itud	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.40948	1 °	39.409481 °
пеш				-121.79401	o°	-121.794010 °
DWR ID	16368					

## Comment Code

#### Inspector Comment

FS\_ID:53317 DS\_ID:16368 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS

end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 8/23/2018 9:14:00 AM

Photo 2 of 3: UCIP\_SP\_2019\_53317\_66974.jpg

Headwall and flapgate located on water side of levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	14.58	Rating **	U	Issue No.		130 (cont)
LM End	14.58	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.40948	۱°	39.409481 °
пеш				-121.794010	°	-121.794010 °
DWR ID	16368					

## Inspector Comment

Comment Code

FS\_ID:53317 DS\_ID:16368 EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 8/23/2018 WS pipe unable to be inspected due to heavy vegetation at inlet, so assume same as last inspection. Noticed a long crack a couple feet above WS headwall that could be of concern; possible future slough if soil gets saturated during next high water event and could be a sign of internal pipe degredation. LS outlet and slope looked good. Urgent due to long crack, obstructed inspection view of WS inlet, and 2016 photos of holes in pipe (D. Sanoski - DWR UCIP).6/15/2017 WS pipe end still showing heavy signs of corrosion and deterioration with visible holes between the concrete headwall and flap gate flange. Pipe was almost 100% full of water so could not visually inspect inside of the pipe to see if theres any damage inside of the levee segment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard-AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioation but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS

end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 8/23/2018 9:14:00 AM



Head wall and screw gate located on land side of levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	14.91	Rating **	A/W	Issue No.		131
LM End	14.91	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.4065	70°	39.406570 °
пеш				-121.7987	70°	-121.798770 °
DWR ID	16367					

## Comment Code

#### Inspector Comment

FS\_ID:52242 DS\_ID:16367 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

FS Date: 6/19/2017 2:01:26 PM

LM Start	14.91	Rating **	A/W	Issue No.	131 (cont)
LM End	14.91	Issue Type +	Ma	Location *	



WS headwall and flapgate

#### Photo 2 of 3: UCIP\_SP\_2019\_52242\_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	14.91	Rating **	A/W	Issue No.		131 (cont)		
LM End	14.91	Issue Type +	Ма	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP LMA Responsibility			39.4065	70°	39.406570 °		
пеш				-121.7987	70°	-121.798770 °		
DWR ID	16367							

## Comment Code

#### Inspector Comment

FS\_ID:52242 DS\_ID:16367 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

FS Date: 6/19/2017 2:01:26 PM

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]

Photo 3 of 3: UCIP\_SP\_2019\_52242\_66982.jpg



WS slope cleared of vegetation

LM Start	15.58	Rating **	М	Issue No.	57	
LM End	15.58	Issue Type +	Ma	Location *	LS	
Category Earthen Levee		GPS Latitude/Longitude				
						End
Item	Slope Stability			39.400380 °		39.400380 °
пеш			-121.8084	32 °	-121.808432 °	
DWR ID	DWR_MA0013_01_f _ 2016_57					
Comment Code						
S1 : Repair slope instability.						

Inspector Comment

# Photo 1 of 1: SP\_2019\_MA0013\_300\_57\_20190327\_00008.jpg



View of slope instability along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	16.19	Rating **	A/W	Issue No.		134
LM End	16.19	Issue Type +	Ма	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
DWR UCIP LMA Responsibility		39.39474	48 °	39.394748 °		
item				-121.81736	60°	-121.817360 °
DWR ID	16372					

## Inspector Comment

Comment Code

FS\_ID:52245 DS\_ID:16372 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report 5/22/2014. Same as last

noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD\_STRUCT\_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

FS Date: 6/19/2017 2:09:30 PM

LM Start	16.19	Rating **	A/W	Issue No.	134 (cont)
I M End	16.19	Issue Type +	Ma	Location *	



WS view of structure

#### Photo 2 of 3: UCIP\_SP\_2019\_52245\_74503.jpg



View of crossing and panels attached to concrete walls.

Location Rating Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiancy N: Not Inspected/Rated A : Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR : Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	16.19	Rating **	A/W	Issue No.		134 (cont)
LM End	16.19	Issue Type +	Ma	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.39474	8°	39.394748°
пеш				-121.81736	o°	-121.817360°
DWR ID	16372					

## Comment Code

#### Inspector Comment

FS\_ID:52245 DS\_ID:16372 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/15/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing

appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 The structures are closed with metal stop logs (weir type structure). The stop logs appear to be removable, however; there is a wooden bridge over the structure that would have to be removed in order to raise the stop logs. There is 1-foot of clearance between the bottom of the bridge and the top of the stop logs. FIELD\_STRUCT\_DESC: Two 10-foot by 10-foot concrete drain openings through the levee at an unknown depth below the crown. Wooden bridge, 10 ton load limit. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.43)]

FS Date: 6/19/2017 2:09:30 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52245\_74501.jpg



LS view of structure

LM Start	16.33	Rating **	М	Issue No.	77		
LM End	16.33	Issue Type +	Ма	Location *		LS	_
Cotogony	Earthen L	.evee		GPS La	tituc	le/Longitude	
Category		Start		End			
ltom	Encroach	ments		39.3934	12°	39.393412	0
Item					20°	-121.819220	0
DWR ID	DWR_MAG	013_01_s _ 201	9_77				

#### Comment Code

PR: Prunings

#### Inspector Comment

Remove the prunings from the landside slope.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	16.44	Rating **	М	Issue No.		78		
LM End	16.44	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroach	ments		39.3923	79°	39.392379°		
item				-121.8208	20°	-121.820820 °		
DWR ID	DWR_MA0013_01_s _ 2019_78							
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				
Remove th	e prunings	s from the lan	dside slo	pe.				

No Photos

LM Start	16.52	Rating **	М	Issue No.		56	
LM End	16.52	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory			Start		End		
Encroachments Item		39.3916	75 °	39.391675°			
item				-121.8219	32 °	-121.821932 °	
DWR ID	DWR_MA0	013_01_f _ 201	6_56				
		Comn	nent Cod	le			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			
Remove th	Remove the prunings from the landside slope.						

No Photos

		D // +*			1		
LM Start	16.62	Rating **	М	Issue No.		79	
LM End	16.62	Issue Type +	Ma	Location *	LS		
Category	Earthen L	.evee		GPS L	atitud	e/Longitude	
				Start		End	
Item	Encroachments			39.3907	'09 °	39.390709°	
item				-121.823432 °		-121.823432 °	
DWR ID	DWR_MAG	013_01_s _ 201	19_79				
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspect	or Comm	nent			
Remove th	Remove the prunings from the landside slope.						

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	16.76	Rating **	M	Issue No.		80
LM End	16.76	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory			Start		End	
Encroachments			39.3894	42 °	39.389442 °	
item				-121.825426 °		-121.825426 °
DWR ID	DWR_MA0	013_01_s _ 201				
		Comn	nent Cod	le		
PR : Pruni	ngs					
		Inspecto	or Comm	nent		
Remove the prunings from the landside toe.						

No Photos

LM Start	17.23	Rating **	М	Issue No.		136	
LM End	17.23	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Category				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.38517	2°	39.385172	•
item				-121.83206	0 °	-121.832060	٥
DWR ID	16369						

#### Comment Code

#### Inspector Comment

FS\_ID:52249 DS\_ID:16369 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS

of cleared WS & LS slopes.
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS).
[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

and LS slope due to dense vegatation and steep slopes. Need photos

FS Date: 6/19/2017 2:20:18 PM

## Photo 1 of 3 : UCIP\_SP\_2019\_52249\_67017.jpg



View of WS slope and toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/15/2019 05/15/2019	Makar Sokol

LM Start	17.23	Rating **	М	Issue No.		136 (cont)
LM End	17.23	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory						End
Item	DWR UCI	P LMA Respo	onsibility	39.3851	72 °	39.385172°
пеш				-121.8320	60°	-121.832060 °
DWR ID	16369					

# Comment Code Inspector Comment

FS\_ID:52249 DS\_ID:16369 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/15/2017 Flapgate bolted shut. Hinges seem very stiff to operateas gate will not fully close and has baout a 1/2" gap near the top. Land owner claims the gate leaks during high water times. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegatation and steep slopes. Need photos of cleared WS & LS slopes.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]

FS Date: 6/19/2017 2:20:18 PM

LM Start	17.23	Rating **	М	Issue No.	136 (cont)
I M End	17.23	Issue Type +	Ma	Location *	



View of WS headwall and flap gate.

#### Photo 3 of 3: UCIP SP 2019 52249 67018.jpg



View of LS headwall.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.05	Rating **	М	Issue No.		912
LM End	0.05	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.5738	16°	39.573816°
пеш				-121.7012	90°	-121.701290°
DWR ID	16397					

## Inspector Comment

Comment Code

FS\_ID:52111 DS\_ID:16397 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP -

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



Overview looking south on left levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.05	Rating **	М	Issue No.		912 (cont)
LM End	0.05	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCIP LMA Responsibility			39.5738 <sup>-</sup>	16°	39.573816 °
пеш			-121.70129	90°	-121.701290 °	
DWR ID	16397					

## Inspector Comment

Comment Code

FS\_ID:52111 DS\_ID:16397 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP -

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04].

FS Date: 6/7/2017 12:00:22 PM



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.05	Rating **	М	Issue No.		912 (cont)
LM End	0.05	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Calegory					End
Item	DWR UC	39.57381	6°	39.573816°		
пеш			-121.70129	o°	-121.701290 °	
DWR ID	16397					·

## Inspector Comment

Comment Code

FS ID:52111 DS\_ID:16397 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing apperas to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the was through to the WS. (DWR Sutter Yard afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard afreitag)4/19/2012 4-6 inch pipe is not part of original crossing-remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning

properly as irrigation pipe passes inside crossing. (DWR UCIP -FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe

through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento

O&M Manual 519, June 1962 (HLM 0.04). FS Date: 6/7/2017 12:00:22 PM

Photo 3 of 3: UCIP\_SP\_2019\_52111\_45643.jpg

LS headwall blocked by overgrown branches.

Rating A : Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

MA0013

#### Flood Control Project Maintenance Levee Inspections

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.06	Rating **	М	Issue No.		50		
LM End	0.06	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		39.5736	92°	39.573692°		
пеш	item				86°	-121.701286°		
DWR ID DWR_MA0013_02_f _ 2016_50								
		Comn	nent Cod	le				
T1: Trim t	rees to at l	east five feet	above g	round level				
Inspector Comment								

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.58	Rating **	М	Issue No.		913
LM End	0.58	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Lat	ituc	le/Longitude		
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.56647	9°	39.566479°
пеш			-121.70243	0 °	-121.702430 °	
DWR ID	16398					·

## Inspector Comment

Comment Code

FS\_ID:52112 DS\_ID:16398 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM



Overview looking south

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.58	Rating **	М	Issue No.		913 (cont)		
LM End	0.58	Issue Type +	Ма	Location *				
Category				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.5664	79°	39.566479	٥	
пеш				-121.7024	30°	-121.702430	0	
DWR ID 16398								
	Comment Code							

#### Inspector Comment

FS\_ID:52112 DS\_ID:16398 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

#### Photo 2 of 3: UCIP\_SP\_2019\_52112\_67048.jpg



View of WS slope and toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.58	Rating **	М	Issue No.		913 (cont)		
LM End	0.58	Issue Type +	Ма	Location *				
Category				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.5664	79°	39.566479	٥	
пеш				-121.7024	30°	-121.702430	0	
DWR ID 16398								
	Comment Code							

#### Inspector Comment

FS\_ID:52112 DS\_ID:16398 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS ditch at outlet is getting over grown with vegetation. WS near concrete standpipe is overgrown with vegetation. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 0.57)] FS Date: 6/7/2017 12:03:30 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52112\_67045.jpg



Screw gate located on WS of levee. Screw gate covers needs to be repaired.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	0.70	Rating **	U	Issue No.		58			
LM End	4.15	Issue Type +	Ма	Location *		WS			
Earthen Levee				GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Vegetatio	n		39.5646	75°	39.528043 °			
пеш	-121.702383 ° -121.69859								
DWR ID DWR_MA0013_02_s _ 2019_58									
		Comn	nent Cod	le					
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes	and			
easements	S.								
		Inspecto	or Comm	nent					



View of the vegetation on the waterside slope. Spring 2019.

LM Start	1.67	Rating **	U	Issue No.		60		
LM End	4.79	Issue Type +	Ma	Location *	LS			
Category Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Vegetatio	n		39.5513	84°	39.526767 °		
пеш				-121.705298°		-121.684669 °		
DWR ID	DWR_MAG	013_02_s _ 201	9_60					
		Comn	nent Cod	le				
V1 : Contro	ol annual (	grass and wee	ds on th	e levee slo <sub>l</sub>	oes	and		
easements.								
	Inspector Comment							

No Photos

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.70	Rating **	М	Issue No.		914				
LM End	1.70	Issue Type +	Ma Location *		Issue Type + Ma Location *		+ Ma Location *		Ma Location *	
Catagony	Category			GPS Latitude/Longitude						
Calegory			Start		End					
Item	DWR UCI	P LMA Respo	onsibility	39.5511	78°	39.551178°				
пеш					60°	-121.705660 °				
DWR ID	16399									

## Inspector Comment

Comment Code

FS ID:52114 DS\_ID:16399 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/7/2017 12:14:04 PM

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)]

Photo 1 of 3: UCIP\_SP\_2019\_52114\_67059.jpg



Overview of crossing

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.70	Rating **	М	Issue No.	914 (cont)		
LM End	1.70	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P LMA Respo	nsibility	39.55117	'8 °	39.551178°	
пеш				-121.70566	° 0	-121.705660 °	
DWR ID	DWR ID 16399						
Comment Code							

#### Inspector Comment

FS ID:52114 DS\_ID:16399 EP NO: N/A

Repair Type: Non-Urgent

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

Crossing Status: Found UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M



View of flap gate on WS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	1.70	Rating **	М	Issue No.	914 (cont)			
LM End	1.70	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	zategory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.55117	78°	39.551178		
пеш				-121.70566	° 06	-121.705660		
DWR ID	ID 16399							
	Comment Code							

#### Inspector Comment

FS\_ID:52114 DS\_ID:16399 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 LS slide gate stem is bent and the gate appears as if it will not open. LS inlet is becoming heavily vegetated next to rice field. WS flap gate is blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- AFreitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 -Dr. John O. Gibbs, DBA Empire Land Company) [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 1.70)] FS Date: 6/7/2017 12:14:04 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52114\_67057.jpg



View of WS toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.53	Rating **	A/W	Issue No.		915
LM End	2.53	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.53919	5°	39.539195 °
пеш					o°	-121.706070 °
DWR ID	16400					

# Comment Code

#### Inspector Comment

FS\_ID:52115 DS\_ID:16400 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-

AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

### Photo 1 of 3: UCIP\_SP\_2019\_52115\_67063.jpg



Overview of levee crown looking south

#### Photo 2 of 3: UCIP\_SP\_2019\_52115\_67068.jpg



View of WS slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)			
LM End	2.53	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.53919	95 °	39.539195°		
пеш				-121.70607	70°	-121.706070 °		
DWR ID	ID 16400							
Comment Code								

#### Inspector Comment

FS\_ID:52115 DS\_ID:16400 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS flapgate blocked shut by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-

AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:18:14 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52115\_67064.jpg



Headwall and flap gates (2) located on WS

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.53	Rating **	A/W	Issue No.		916
LM End	2.53	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.53917	9°	39.539179
пеш					°	-121.706060
DWR ID	17169					

## Inspector Comment

Comment Code

FS\_ID:52116 DS\_ID:17169 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection 12/9/2013 Same as last inspection 12/9/2013 Same as last inspection 7/10/2013 Same as

inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection.
FIELD STRUCT\_DESC: 2 of 2: 36-inch corrugated metal drainage pipe

through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]
FS Date: 6/7/2017 12:28:51 PM

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)
LM End	2.53	Issue Type +	Ma	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_52116\_67075.jpg



Overview at levee crown looking south

#### Photo 2 of 3: UCIP\_SP\_2019\_52116\_67074.jpg



View of WS slope.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)				
LM End	2.53	Issue Type +	Ма	Location *					
Category	Suppleme	ental		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.5391	79°	39.539179	٥		
пеш				-121.7060	60°	-121.706060	0		
DWR ID	17169								
	Comment Code								

#### Inspector Comment

FS ID:52116 DS\_ID:17169 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS inlet was underwater. WS appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Same as

last inspection.

FIELD STRUCT\_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)]

FS Date: 6/7/2017 12:28:51 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52116\_67071.jpg



Headwall and flap gates (2) located on the WS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.62	Rating **	М	Issue No.	917	
LM End	2.62	Issue Type +	Ma	Location *		
Category Supplemental GPS Lat				itud	le/Longitude	
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.53786	4 °	39.537864 °
пеш				-121.70619	o°	-121.706190 °
DWR ID	16402					

# Comment Code Inspector Comment

FS\_ID:52117 DS\_ID:16402 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Overview looking south from left levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.62	Rating **	М	Issue No.	917 (cont)			
LM End	2.62	Issue Type +	Ma	Location *				
Category				Supplemental GPS Latitude/Lo				le/Longitude
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.53786	4 °	39.537864 °		
пеш				-121.70619	o°	-121.706190 °		
DWR ID	16402							

# Comment Code

#### Inspector Comment

FS\_ID:52117 DS\_ID:16402 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM

Photo 2 of 3 : UCIP\_SP\_2019\_52117\_67076.jpg

Headwall and flap gate located on WS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.62	Rating **	М	Issue No.		917 (cont)
LM End	2.62	Issue Type +	Ма	Location *		
Category				GPS Lat	ituc	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.53786	4 °	39.537864°
пеш				-121.70619	0 °	-121.706190 °
DWR ID	16402					·

## Inspector Comment

Comment Code

FS\_ID:52117 DS\_ID:16402 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Sediment blocking LS slide gate from closing fully. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13G 2011 p 0148 for LS gate obstructed by vegetation and WS flap gate is not functionning (propped open).

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)] FS Date: 6/7/2017 12:45:23 PM



Headwall and screw gate located on LS.

Rating

Location

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.63	Rating **	М	Issue No.		918
LM End	2.63	Issue Type +	Ma	Location *		
Category				GPS Lat	tud	le/Longitude
Calegory	Category				Start	
Item	DWR UC	IP LMA Respo	onsibility	39.53767	۱°	39.537671°
пеш				-121.70621	°	-121.706210°
DWR ID	16403					

## Inspector Comment

Comment Code

FS\_ID:52119 DS\_ID:16403 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.12/9/2013 Same as last inspection and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

LM Start	2.63	Rating **	М	Issue No.	918 (cont)
LM End	2.63	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_52119\_67087.jpg



Overview at levee crown looking south

#### Photo 2 of 3: UCIP\_SP\_2019\_52119\_67084.jpg



Headwall and flap gate located on WS

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.63	Rating **	М	Issue No.		918 (cont)	
LM End	2.63	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P LMA Respo	nsibility	39.53767	0	39.537671	۰
пеш				-121.706210	°	-121.706210	°
DWR ID	16403						

#### Comment Code

#### Inspector Comment

FS\_ID:52119 DS\_ID:16403 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)]

FS Date: 6/7/2017 12:48:30 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52119\_67086.jpg



Headwall and screw gate located on the LS

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.65	Rating **	М	Issue No.		919
LM End	2.65	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.5374	66°	39.537466 °
пеш				-121.7062	40°	-121.706240 °
DWR ID	16415					

## Inspector Comment

Comment Code

FS\_ID:52120 DS\_ID:16415 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

LM Start	2.65	Rating **	М	Issue No.	919 (cont)
LM End	2.65	Issue Type +	Ma	Location *	



Overview looking south from left levee

#### Photo 2 of 3: UCIP SP 2019 52120 67091.jpg



Headwall and flap gate located on WS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	2.65	Rating **	М	Issue No.		919 (cont)
LM End	2.65	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5374	66°	39.537466 °
пеш				-121.7062	40 °	-121.706240 °
DWR ID	16415					

## Comment Code

#### Inspector Comment

FS ID:52120 DS\_ID:16415 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both gates partially submerged during site visit. Appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 6/7/2017 12:50:33 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52120\_67092.jpg



WS headwall and flap gate.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.59	Rating **	М	Issue No.		920		
LM End	3.59	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	IP LMA Respo	onsibility	39.5238	29°	39.523829	0	
пеш				-121.7062	90°	-121.706290	0	
DWR ID 16405								
	Comment Code							

## Inspector Comment

FS\_ID:52121 DS\_ID:16405 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]

FS Date: 6/7/2017 12:58:12 PM

Photo 1 of 3: UCIP\_SP\_2019\_52121\_67094.jpg



Overview looking south from left levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.59	Rating **	М	Issue No.	920 (cont)		
LM End	3.59	Issue Type +	Ма	Location *			
Category		GPS Latitude/Longitude					
Calegory			Start End				
Item	DWR UC	P LMA Respo	nsibility	39.52382	29°	39.523829	0
пеш				-121.70629	90°	-121.706290	0
DWR ID 16405							
	Comment Code						

## Inspector Comment

FS\_ID:52121 DS\_ID:16405 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]

Manual 519, June 1962 (HLM 3. FS Date: 6/7/2017 12:58:12 PM

## Photo 2 of 3: UCIP\_SP\_2019\_52121\_67095.jpg



Flap gate submerged in water on WS of levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.59	Rating **	М	Issue No.		920 (cont)
LM End	3.59	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.52382	9°	39.523829°
Item				-121.70629	0°	-121.706290 °
DWR ID	16405					

## Comment Code

#### Inspector Comment

FS ID:52121 DS\_ID:16405 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Abandoned- LS slide gate completely buried in rice field and WS frlap gate almost fully buried. (DWR Sutter Yard- AFreitag)11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetationneed photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]

FS Date: 6/7/2017 12:58:12 PM

# Photo 3 of 3: UCIP\_SP\_2019\_52121\_67096.jpg



View of flap gate submerged on WS toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.65	Rating **	A/W	Issue No.	921				
LM End	3.65	Issue Type +	Ma	Location *					
Category				GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	DWR UC	IP LMA Respo	onsibility	39.5235	56°	39.523556	0		
пеш				-121.7053	40°	-121.705340	0		
DWR ID	16848	16848							
Comment Code									

## Inspector Comment

FS\_ID:52122 DS\_ID:16848 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)
LM End	3.65	Issue Type +	Ma	Location *	



Overview looking south on left levee

## Photo 2 of 3 : UCIP\_SP\_2019\_52122\_67103.jpg



Headwall and flap gate located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.65	Rating **	A/W	Issue No.		921 (cont)	
LM End	3.65	Issue Type +	Ма	Location *			
Category Supplemental				GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52355	6°	39.523556	٥
пеш				-121.70534	o°	-121.705340	٥
DWR ID	16848						

## Inspector Comment

Comment Code

FS\_ID:52122 DS\_ID:16848 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but appear to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]

FS Date: 6/7/2017 1:21:24 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52122\_67101.jpg



Headwall and screw gate located on LS.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.83	Rating **	М	Issue No.	922			
LM End	3.83	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.52435	50°	39.524350°		
пеш				-121.70218	30°	-121.702180 °		
DWR ID	16847							
Comment Code								

## Inspector Comment

FS\_ID:52123 DS\_ID:16847 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13J\_2011\_p\_0010 for WS gate wedged open & missing LS slide gate.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 6/7/2017 1:24:40 PM



Overview looking south on left levee

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.83	Rating **	М	Issue No.		922 (cont)
LM End	3.83	Issue Type +	Ма	Location *		
Category Supplemental				GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.52435	50°	39.524350 °
пеш				-121.70218	30°	-121.702180 °
DWR ID	16847					

### Comment Code

#### Inspector Comment

FS ID:52123 DS\_ID:16847 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13J\_2011\_p\_0010 for WS gate wedged open & missing LS slide gate.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM



Headwall and flap gate located on WS toe.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	3.83	Rating **	М	Issue No.	922 (cont)		
LM End	3.83	Issue Type +	Ма	Location *			
Category				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.5243	50°	39.524350	0
пеш				-121.7021	80°	-121.702180	0
DWR ID	16847						
Comment Code							

# Inspector Comment

FS\_ID:52123 DS\_ID:16847 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged but crossing

appears to be in good condition. (DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13J\_2011\_p\_0010 for WS gate wedged open & missing LS slide gate.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]

FS Date: 6/7/2017 1:24:40 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52123\_67110.jpg



View of channel at crossing looking D/S.

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.17	Rating **	М	Issue No.	923		
LM End	4.17	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP LMA Responsibility				10°	39.528210°	
item		-121.698410 °		-121.698410 °			
DWR ID 16846							
Comment Code							

## Inspector Comment

FS\_ID:52124 DS\_ID:16846 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

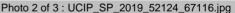
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]

FS Date: 6/7/2017 1:27:00 PM

LM Start	4.17	Rating **	М	Issue No.	923 (cont)
LM End	4.17	Issue Type +	Ma	Location *	



Overview looking east on right bank of Cottonwood





Unable to determine condition of flap gate on WS due to high water.

Location Rating + Issue Type LS: Land Side N/A: Not Applicable Ma: Maintenance Deficiancy N: Not Inspected/Rated : Acceptable Minimally Acceptable WS: Water Side C: Corrected Ob: Design & System Obsolescence CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.17	Rating **	М	Issue No.		923 (cont)	
LM End	4.17	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.52821	0 °	39.528210°	
пеш				-121.69841	0 °	-121.698410 °	
DWR ID	16846						

# Inspector Comment

Comment Code

FS\_ID:52124 DS\_ID:16846 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 Both ends submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 4.20)] FS Date: 6/7/2017 1:27:00 PM

## Photo 3 of 3: UCIP\_SP\_2019\_52124\_67113.jpg



Overview of LS screw gate and concrete sump structure.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.65	Rating **	A/W	Issue No.	ue No. 924		
LM End	4.65	Issue Type +	Ма	Location *			
Category	ental	GPS La	titud	le/Longitude			
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.5325	10°	39.532510°	
пеш				-121.6913	40 °	-121.691340°	
DWR ID 16845							
		Comn	nent Cod	le			

# Inspector Comment

FS\_ID:52125 DS\_ID:16845 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos of clear WS slope.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)
LM End	4.65	Issue Type +	Ma	Location *	



Overview looking east on right levee of Gold Run Creek (referred to Unit 2 of Cherokee Canal).

#### Photo 2 of 3: UCIP SP 2019 52125 67122.jpg



Headwall and flap gate located on WS.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	4.65	Rating **	A/W	Issue No.		924 (cont)	_
LM End	4.65	Issue Type +	Ma	Location *			
Category	Supplemental				titud	le/Longitude	
Calegory		Start		End			
Item	DWR UC	IP LMA Respo	onsibility	39.5325	10°	39.532510	٥
пеш				-121.6913	40 °	-121.691340	٥
DWR ID	16845						

## Comment Code

#### Inspector Comment

FS\_ID:52125 DS\_ID:16845 EP\_NO: N/A

of clear WS slope.

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 LS Slide gate mostly underwater due to rice field being flooded but crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 Crossing appears to be in good condition. No noticeable issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope has been cleared of vegetation and is in good condition.4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)]

FS Date: 6/7/2017 1:41:34 PM

#### Photo 3 of 3: UCIP\_SP\_2019\_52125\_67123.jpg



View of channel at crossing.

LM Start	4.79	Rating **	U	Issue No.	72		
LM End	17.18	Issue Type +	Ma	Location *	LS		
Category	evee	GPS La	titud	e/Longitude			
Category			Start		End		
Item	Vegetatio	n		39.52676	7°	39.403468°	
пеш				-121.68466	9°	-121.799217°	
DWR ID	DWR ID DWR_MA0013_02_s _ 2019_72						
	Comment Code						

V1 : Control annual grass and weeds on the levee slopes and easements.

#### Inspector Comment



View of the vegetation on the landside slope. Spring 2019.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

		II.				
LM Start	4.79	Rating **	U	Issue No.		64
LM End	21.15	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		39.5267	66°	39.367786 °
пеш				-121.6846	80°	-121.856765 °
DWR ID DWR_MA0013_02_s _ 2019_64						
		Comn	nent Cod	le		
V1 : Contre	•	grass and wee	eds on th	e levee slo	pes a	and
		Inspecto	or Comm	nent		



View of the vegetation on the waterside slope. Spring 2019.

LM Start	5.01	Rating **	A/W	Issue No.		925	
LM End	5.01	Issue Type +	Ma	Location *			
Category	Supplemental				atituc	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5262	98°	39.526298	٥
iteiii				-121.6883	20°	-121.688320	0
DWR ID	16395						

# Inspector Comment

Comment Code

FS\_ID:52126 DS\_ID:16395 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 5.06)] FS Date: 6/7/2017 1:54:08 PM

# Photo 1 of 3: UCIP\_SP\_2019\_52126\_67131.jpg



Overview looking west on the left levee of Cottonwood

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.01	Rating **	A/W	Issue No.		925 (cont)		
LM End	5.01	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory				Start		End		
Item	DWR UCI	P LMA Respo	onsibility	39.52629	98°	39.526298 °		
пеш				-121.6883	20°	-121.688320 °		
DWR ID	16395							

# Comment Code

#### Inspector Comment

FS\_ID:52126 DS\_ID:16395 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 WS mostly submerged but crossing

appears to be in good condition.(DWR Sutter Yard-

AFreitag)11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]

FS Date: 6/7/2017 1:54:08 PM



#### Photo 2 of 3: UCIP\_SP\_2019\_52126\_67129.jpg



Headwall and flap gate located on WS.

#### Photo 3 of 3: UCIP\_SP\_2019\_52126\_67126.jpg



View of channel at crossing.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	<b>5.09</b> Rating ** A		A/W	Issue No.	926		
LM End	5.09	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.5269	17°	39.526917°	
пеш			-121.6893	40 °	-121.689340 °		
DWR ID	16408						

# Comment Code

#### Inspector Comment

FS\_ID:52129 DS\_ID:16408 EP\_NO: N/A

gate on LS

Repair Type: No Action Needed Crossing Status: Found

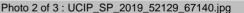
UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE\_CESPK\_M13H\_2011\_p\_0026 for broken

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

LM Start	5.09	Rating **	A/W	Issue No.	926 (cont)
LM End	5.09	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking west.





Headwall and flap gate located on WS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.09	Rating **	A/W	Issue No.		926 (cont)		
LM End	5.09	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	DWR UCIP LMA Responsibility			39.526917°		39.526917°		
пеш				-121.6893	40 °	-121.689340 °		
DWR ID	16408							
	Comment Code							

#### Inspector Comment

FS\_ID:52129 DS\_ID:16408 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE\_CESPK\_M13H\_2011\_p\_0026 for broken gate on LS.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 6/7/2017 2:01:22 PM

#### Photo 3 of 3: UCIP\_SP\_2019\_52129\_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.29 Rating **		М	Issue No.		927
LM End	5.29	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.5259	58°	39.525958°
пеш				-121.6927	30°	-121.692730 °
DWR ID	16409					

# Inspector Comment

Comment Code

FS\_ID:52130 DS\_ID:16409 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0035 non-functional crossing due to overgrown vegetation on WS flap gate. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe

through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)] FS Date: 6/7/2017 2:02:27 PM

LM Start	5.29	Rating **	М	Issue No.	927 (cont)
LM End	5.29	Issue Type +	Ma	Location *	



Overview of crossing looking downstream.

#### Photo 2 of 3: UCIP\_SP\_2019\_52130\_67149.jpg



View of WS headwall with dense vegetation in channel.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	5.29	Rating **	М	Issue No.		927 (cont)	
LM End	5.29	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	39.52595	в°	39.525958	0
пеш				-121.69273	o°	-121.692730	0
DWR ID	16409						

# Inspector Comment

Comment Code

FS\_ID:52130 DS\_ID:16409 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 6/5/2017 WS fully submerged and LS slide gate mostly buried by sediment. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard-AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0035 non-functional crossing due to overgrown vegetation on WS flap gate.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]

FS Date: 6/7/2017 2:02:27 PM

#### Photo 3 of 3: UCIP\_SP\_2019\_52130\_67148.jpg



Headwall and flap gate located on WS.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	9.56	Rating **	A/W	Issue No.		933		
LM End	9.56	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	Calegory					End		
Item	DWR UC	DWR UCIP LMA Responsibility				39.477438°		
item				-121.73520	0°	-121.735200 °		
DWR ID	16838							

#### Comment Code

#### Inspector Comment

FS\_ID:52145 DS\_ID:16838 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)
LM End	9.56	Issue Type +	Ma	Location *	



Overview of levee crown at crossing looking D/S.



View of crossing looking from channel towards WS levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)			
LM End	9.56	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.47743	88°	39.477438 °		
пеш			-121.73520	00°	-121.735200 °			
DWR ID 16838								
	Comment Code							

#### Inspector Comment

FS ID:52145 DS\_ID:16838 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crosing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]

FS Date: 6/8/2017 8:19:25 AM



WS view-access well located 60 feet from WS toe.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	9.57	Rating **	A/W	Issue No.		934	
LM End	9.57	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Calegory					End	
Item	DWR UC	DWR UCIP LMA Responsibility			5 °	39.477335 °	
item			-121.73534	o°	-121.735340 °		
DWR ID	16839						

### Comment Code

#### Inspector Comment

FS\_ID:52146 DS\_ID:16839 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)] FS Date: 6/8/2017 8:20:37 AM

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)
LM End	9.57	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_52146\_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

#### Photo 2 of 3: UCIP SP 2019 52146 67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)			
LM End	9.57	Issue Type +	Ма	Location *				
Category	ental		GPS Latitude/Longitude					
Calegory	ategory					End		
Item	DWR UC	P LMA Respo	nsibility	39.47733	85 °	39.477335°		
пеш				-121.73534	o Ol	-121.735340°		
DWR ID 16839								
	Comment Code							

#### Inspector Comment

FS\_ID:52146 DS\_ID:16839 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 6/5/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with clearned slopes.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flap gate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)] FS Date: 6/8/2017 8:20:37 AM

Photo 3 of 3: UCIP\_SP\_2019\_52146\_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

LM Start	10.71	Rating **	М	Issue No.		77
LM End	10.71	Issue Type +	Ма	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category	Calegory					End
Item	Trim / Thin Trees			39.4626	33 °	39.462633 °
пеш			-121.7452	34 °	-121.745234 °	
DWR ID DWR_MA0013_02_s _ 2019_77						

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Comment Code

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

MA0013

#### Flood Control Project Maintenance Levee Inspections

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	10.77	Rating **	М	Issue No.		76	
LM End	10.77	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		39.4618	76°	39.461876 °	
пеш				-121.7457	'35 °	-121.745735 °	
DWR ID DWR_MA0013_02_s _ 2019_76							
		Comn	nent Cod	le			
T1: Trim t	rees to at l	east five feet	above g	round level			
		Inspecto	or Comm	nent			

No Photos

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.88	Rating **	М	Issue No.		940	
LM End	12.88	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.4347	79°	39.434779°	
пеш				-121.7639	40°	-121.763940 °	
DWR ID	16385						

### Inspector Comment

Comment Code

FS\_ID:52154 DS\_ID:16385 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0147 for limited visibility of LS and WS

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]

FS Date: 6/8/2017 8:57:36 AM



Overview of crossing looking downstream at the left bank of Cherokee Canal.

+ Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.88	Rating **	М	Issue No.		940 (cont)	
LM End	12.88	Issue Type +	Ма	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory						End	
Item	DWR UC	IP LMA Respo	nsibility	39.4347	79°	39.434779 °	
пеш				-121.7639	40 °	-121.763940 °	
DWR ID	16385						
Comment Code							

#### Inspector Comment

FS ID:52154 DS\_ID:16385 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0147 for limited visibility of LS and WS

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]

FS Date: 6/8/2017 8:57:36 AM

#### Photo 2 of 3: UCIP\_SP\_2019\_52154\_67337.jpg



Stand pipe with screw gate WS

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	12.88	Rating **	М	Issue No.		Issue No.		940 (cont)
LM End	12.88	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	DWR UCI	IP LMA Respo	nsibility	39.43477	9°	39.434779 °		
пеш				-121.76394	o°	-121.763940 °		
DWR ID	16385							

#### Comment Code

#### Inspector Comment

FS\_ID:52154 DS\_ID:16385 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS end cannot be located due to heavy vegetation. LS screwgate was mostly submerged during site visit. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard-AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0147 for limited visibility of LS and WS

FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 6/8/2017 8:57:36 AM

Photo 3 of 3: UCIP\_SP\_2019\_52154\_67335.jpg



View of the inside of the WS stand pipe. No obstructions blocking slide gate.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	15.44	Rating **	М	Issue No.		941	
LM End	15.44	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	onsibility	39.41920	)9°	39.419209°	
пеш				-121.77368	80°	-121.773680 °	
DWR ID	16376						
Comment Code							

# Inspector Comment

FS\_ID:52156 DS\_ID:16376 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.62)]

FS Date: 6/8/2017 9:22:20 AM

vegetation.



Overview of crossing looking downstream at the left bank of Cherokee Canal.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	15.44	Rating **	М	Issue No.	941 (cont)			
LM End	15.44	Issue Type +	Ма	Location *				
Category	Supplemental GPS Latitude/Longitude							
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.41920	)9 °	39.419209°		
пеш				-121.77368	30°	-121.773680°		
DWR ID	D 16376							
Comment Code								

#### Inspector Comment

FS\_ID:52156 DS\_ID:16376 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by

vegetation.
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe

HELD\_STACE 1\_01505. 24-Incl Collagated Metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.62)]
FS Date: 6/8/2017 9:22:20 AM



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

CR: Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	15.44	Rating **	М	Issue No.	941 (cont)			
LM End	15.44	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.419209° 39.41920				
пеш				-121.77368	-121.773680 °			
DWR ID 16376								
	Comment Code							

# Inspector Comment

FS\_ID:52156 DS\_ID:16376 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate is bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing.6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection.12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded.7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by vegetation.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

Manual 519, June 1962 (HLM 15.62)] FS Date: 6/8/2017 9:22:20 AM



View of WS headwall and flap gate.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	15.68	Rating **	М	Issue No.	942			
LM End	15.68	Issue Type +	Ма	Location *				
Category Supplemental GPS Latitude/Lo					le/Longitude			
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	nsibility	39.417043 ° 39.41704				
item				-121.7772	-121.777240 °			
DWR ID 16382								
	Comment Code							

#### Inspector Comment

FS\_ID:52157 DS\_ID:16382 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0022 -- unknown issue.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

LM Start	15.68	Rating **	М	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	



Overview of crossing looking downstream of the left bank of Cherokee



View of WS slope. Limited inspection due to the dense vegetation.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	15.68	Rating **	М	Issue No.		942 (cont)
LM End	15.68	Issue Type +	Ma	Location *		
Supplemental Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.41704	3°	39.417043°
Item				-121.77724	0°	-121.777240°
DWR ID	16382					

### Comment Code

#### Inspector Comment

FS\_ID:52157 DS\_ID:16382 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 LS pipe end is buried and location unknown. WS flap gate bolted shut. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0022 -- unknown issue.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 6/8/2017 9:26:40 AM

#### Photo 3 of 3: UCIP\_SP\_2019\_52157\_67350.jpg



View of WS headwall.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	16.52	Rating **	М	Issue No.		54	
LM End	16.52	Issue Type +	Ma	Location *		WS	
Catagony	Earthen L	evee		GPS L	atitud	e/Longitude	
Category				Start		End	
Item	Animal Co	Control 39.409548° 3			39.409548 °		
item				-121.7896	68°	-121.789668 °	
DWR ID DWR_MA0013_02_f _ 2014_54							
		Comn	nent Cod	le			
	dents visib r grout bur	le, but rodent rows.	burrows	visible; ne	ed to	backfill and	
		Inspecto	or Comm	nent			



View of the rodent holes along the waterside slope.

LM Start	17.41	Rating **	N	Issue No.		67		
LM End	17.41	Issue Type +	Ma Location		LS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory			Start		End			
Item	Trim / Thi	n Trees		39.40133	81 °	39.401331°		
пеш				-121.80248	80 °	-121.802480 °		
DWR ID	DWR_MA0	013_02_f _ 201	6_67					

Comment Code

T5: Tree stumps.

#### Inspector Comment

Approximately eight stumps are present at the landside toe.

No Photos

LM Start	17.64	Rating **	М	Issue No.		69		
LM End	17.64	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Slope Sta	Slope Stability			64°	39.399164°		
пеш				-121.8057	87 °	-121.805787 °		
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_69							
		Comn	nent Cod	le				
S1 : Repai	r slope ins	tability.						
Inspector Comment								

Photo 1 of 1 : SP\_2019\_MA0013\_301\_69\_20190327\_00014.jpg



View of slope instability issue along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	17.90	Rating **	С	Issue No.		70	
LM End	17.90	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		39.3968	09°	39.396809°	
пеш				-121.809422 °		-121.809422 °	
DWR ID DWR_MA0013_02_f _ 2016_70							
		Comn	nent Cod	le			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	nent			

No Photos

LM Start	17.93	Rating **	С	Issue No.		71			
LM End	17.93	Issue Type +	Ma	Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude					
Category			Start		End				
Item	Animal Control			39.3964	65 °	39.396465 °			
item				-121.809935 °		-121.809935 °			
DWR ID	DWR ID DWR_MA0013_02_f _ 2016_71								
Comment Code									
A3 : No rodents visible, but rodent burrows visible; need to backfill and									

No Photos

Inspector Comment

compact or grout burrows.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	18.16	Rating **	A/W	Issue No.		945		
LM End	18.16	Issue Type +	Ма	Location *				
Category Supplemental			GPS Latitude/Longitude					
			S			End		
Item	DWR UC	IP LMA Respo	onsibility	39.3944	06°	39.394406°		
пеш			-121.8131	80°	-121.813180°			
DWR ID	DWR ID 16379							
	Comment Code							

#### Inspector Comment

FS\_ID:52161 DS\_ID:16379 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard-AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/26/2016 Crossing appears to be in good

condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0134 for unknown culvert size on LS and no outlet visible on WS.
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)]

FS Date: 6/8/2017 10:18:47 AM

LM Start	18.16	Rating **	A/W	Issue No.	945 (cont)
LM End	18.16	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_52161\_67387.jpg



Overview of crossing looking D/S at left bank of Cherokee Canal.



View of WS slope and berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	18.16	Rating **	A/W	Issue No.		945 (cont)		
LM End	18.16	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitude					
Calegory	Calegory		Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.3944	06 °	39.394406	0	
пеш		-121.8131	80°	-121.813180	0			
DWR ID	16379							
	Comment Code							

#### Inspector Comment

FS\_ID:52161 DS\_ID:16379 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

Manual 519, June 1962 (HLM 18.37)] FS Date: 6/8/2017 10:18:47 AM

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)4/26/2016 Crossing appears to be in good condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegeatation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE CESPK M13E 2011 p 0134 for unknown culvert size on LS and no outlet visible on WS. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional

Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M

#### Photo 3 of 3: UCIP\_SP\_2019\_52161\_67390.jpg



View of flap gate located on WS.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	19.92	Rating **	М	Issue No.		946
LM End	19.92	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	P LMA Respo	onsibility	39.37819	8 °	39.378198°
пеш				-121.83857	0°	-121.838570 °
DWR ID	16375					

#### Comment Code

#### Inspector Comment

FS\_ID:52164 DS\_ID:16375 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD STRUCT DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

LM Start	19.92	Rating **	М	Issue No.	946 (cont)
I M End	19.92	Issue Type +	Ma	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_52164\_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

#### Photo 2 of 3: UCIP\_SP\_2019\_52164\_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	19.92	Rating **	М	Issue No.		946 (cont)
LM End	19.92	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.37819	3°	39.378198°
пеш				-121.838570	°	-121.838570°
DWR ID	16375					

#### Comment Code

#### Inspector Comment

FS\_ID:52164 DS\_ID:16375 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Erosion still present at WS headwall. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard- AFreitag)11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- AFreitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 6/8/2017 10:23:50 AM

#### Photo 3 of 3: UCIP\_SP\_2019\_52164\_67402.jpg



Flap gate located on the WS.

LM Start	20.43	Rating **	М	Issue No.		6	
LM End	20.74	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thi	m / Thin Trees			91 °	39.370795°	
item				-121.8452	25 °	-121.850124°	
DWR ID DWR_MA0013_02_s _ 2013_6							
	Comment Code						

#### T1: Trim trees to at least five feet above ground level.

#### Inspector Comment



View of the overgrown trees along the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	20.52	Rating **	М	Issue No.		73
LM End	20.52	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee		GPS Latitude/Longitude		
Category				Start		End
Item	Encroach	Encroachments			6°	39.372486 °
пеш				-121.84653	7°	-121.846537 °
DWR ID	DWR_MA0	013_02_f _ 201	6_73			
		Comn	nent Cod	le		
TR : Tree	or limb					

Inspector Comment Remove the tree limbs from the landside slope and toe.

LM Start	20.59	Rating **	М	Issue No.		66
LM End	20.59	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS Latitude/Longitude		
Category				Start		End
Item	Encroach	ments	39.3719	55 °	39.371955°	
пеш				-121.847714 °		-121.847714 °
DWR ID	DWR_MA0	013_02_s _ 201	9_66			
		Comn	nent Cod	le		
TR : Tree	or limb					

Inspector Comment

Remove the trees from the landside slope.

-							
LM Start	20.70	Rating **	М	Issue No.		52	
LM End	20.70	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments		39.371108°		39.371108°		
пеш			-121.849520 °		20°	-121.849520°	
DWR ID	DWR_MA0	013_02_s _ 201	14_52				
		Comn	nent Cod	de			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove th	Remove the tree limbs from the landside slope and toe.						
1							

No Photos

No Photos

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	20.74	Rating **	N	Issue No.		74			
LM End	20.74	Issue Type +	Ma	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Trim / Thi	n Trees		39.3707	'96	39.370796°			
item				-121.8501	24 °	-121.850124°			
DWR ID	DWR_MA0	013_02_f _ 201	6_74						
		Comn	nent Coo	le					
T5 : Tree s	stumps.								
		Inspecto	or Comm	nent					

No Photos

LM Start	20.77	Rating **	М	Issue No.	75				
LM End	20.77	Issue Type +	Ма	Location *		WS			
Category Earthen Levee GPS Latitude/Longitude									
Calegory		End							
Item	Erosion /	Bank Caving		39.3706	41 °	39.370641 °			
пеш	-121.850572 ° -121.850572 °								
DWR ID DWR_MA0013_02_f _ 2016_75									
		0		l_					

#### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Photo 1 of 1 : SP\_2019\_MA0013\_301\_75\_20190327\_00018.jpg



View of the erosion along the waterside toe.

LM Start	21.03	Rating **	М	Issue No.		68		
LM End	21.03	Issue Type +	Ma	Location *	LS			
Category Earthen Levee GPS Latitude/Longitude								
Calegory	Start End							
Item	Animal Co	ontrol		39.3686	82 °	39.368682 °		
item				-121.8548	17°	-121.854817 °		
DWR ID DWR_MA0013_02_s _ 2018_68								
Comment Code								

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment



View of the rodent holes along the landside slope.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maint
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Desig
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enfor

Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.15	Rating **	M	Issue No.		3				
LM End	22.79	Issue Type +	Ма	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude				
Calegory				Start		End				
Item	Vegetatio	n		39.3677	86°	39.354762°				
пеш				-121.8567	66 °	-121.882238 °				
DWR ID	DWR ID DWR_MA0013_02_s _ 2019_3									
		Comn	nent Cod	le						
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slop	oes a	and				
easements	6.									
		Inspecto	or Comm	nent						

No Photos

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.35	Rating **	М	Issue No.	950			
LM End	21.35	Issue Type +	Ма	Location *				
Category	le/Longitude							
Calegory		Start		End				
Item	DWR UC	P LMA Respo	onsibility	39.3661	55 °	39.366155 °		
пеш				-121.8598	30°	-121.859880 °		
DWR ID 16384								
Comment Code								

#### Inspector Comment

FS\_ID:52168 DS\_ID:16384 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



Overview of crossing looking downstream.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.35	Rating **	М	Issue No.	950 (cont)			
LM End	21.35	Issue Type +	Ма	Location *				
Category Supplemental GPS Latitude/Longitude								
Start End								
Item	DWR UC	IP LMA Respo	nsibility	39.36615	5 °	39.366155 °		
пеш	-121.859880 ° -121.859880 °							
DWR ID 16384								
	Comment Code							

# Inspector Comment

FS ID:52168 DS\_ID:16384 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)1

FS Date: 6/8/2017 10:33:29 AM



View of WS daylight. Hole present at pipe daylight.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.35	Rating **	М	Issue No.		950 (cont)
LM End	21.35	Issue Type +	Ма	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	39.36615	5°	39.366155°
пеш				-121.85988	o°	-121.859880 °
DWR ID 16384						

#### Comment Code

#### Inspector Comment

FS\_ID:52168 DS\_ID:16384 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Crossing appears to be in good condition. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of existing pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]

FS Date: 6/8/2017 10:33:29 AM



WS-view of internal pipe with severe corrosion-holes present along pipe wall.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.83	Issue No.		951		
LM End	21.83	Issue Type +	Ма	Location *		
Category	Suppleme	GPS La	atitud	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	39.3623	78°	39.362378 °
пеш	item				50°	-121.867350 °
DWR ID	16394					

# Comment Code Inspector Comment

FS\_ID:52170 DS\_ID:16394 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0251 for no outlet visible on WS. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

LM Start			М	Issue No.	951 (cont)
LM End	21.83	Issue Type +	Ma	Location *	



Overview of crossing looking upstream at the left bank of Cherokee Canal.



View of WS headwall.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	21.83 Rating ** M			Issue No.		951 (cont)	
LM End	21.83	Issue Type + Ma Location *					
Category	GPS La	titud	le/Longitude				
Calegory	Calegory					End	
Item	DWR UC	IP LMA Respo	nsibility	39.36237	'8	39.362378	0
пеш	item				0°	-121.867350	0
DWR ID	WR ID 16394						
Comment Code							

#### Inspector Comment

FS\_ID:52170 DS\_ID:16394 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 WS flap gate showing signs of rusting and detioration but still appears to be able to function properly. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpsection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0251 for no outlet visible on WS. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 6/8/2017 10:37:02 AM

#### Photo 3 of 3: UCIP\_SP\_2019\_52170\_67461.jpg



Flap gate located on WS.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	22.13	Rating **	М	Issue No.		2				
LM End	22.79	Issue Type +	Ma	Location *		LS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Calegory				Start		End				
Vegetation				39.3599	86°	39.354762°				
пеш	Item				68°	-121.882238 °				
DWR ID	DWR ID DWR_MA0013_02_s _ 2019_2									
		Comn	nent Cod	le						
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slop	oes a	and				
easements	S.									
	Inspector Comment									

No Photos

LM Start	22.15	Rating **	М	Issue No.		953	
LM End	22.15	Issue Type +	Ma	Location *			
Category	GPS La	titud	le/Longitude				
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	39.35982	27°	39.359827	0
пеш				-121.87230	00°	-121.872300	0
DWR ID	16391						

#### Comment Code

#### Inspector Comment

FS\_ID:52175 DS\_ID:16391 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

#### Photo 1 of 3: UCIP\_SP\_2019\_52175\_67498.jpg



View of WS slope looking from WS headwall to levee crown.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	22.15	<b>22.15</b> Rating ** M		Issue No.		953 (cont)
LM End	22.15	Issue Type +	Location *			
Category	Suppleme	GPS Lat	itud	e/Longitude		
Calegory	legory					End
Item	DWR UC	IP LMA Respo	nsibility	39.35982	7°	39.359827°
пеш			-121.87230	o°	-121.872300 °	
DWR ID	16391					

# Comment Code

#### Inspector Comment

FS\_ID:52175 DS\_ID:16391 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/30/2017 Location of LS inlet still unknown. Need to trace with utility locator/GPR to find. Pipe has been selected to be internally cleaned and inspected as part of the DMP project. (DWR Sutter Yard - AFreitag)11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard -

AFreitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 6/8/2017 10:42:36 AM

LM Start	22.15	Rating **	M	Issue No.	953 (cont)
I M End	22.15	Issue Type +	Ma	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_52175\_67496.jpg



View of WS slope looking from WS headwall to levee crown.

#### Photo 3 of 3: UCIP\_SP\_2019\_52175\_67497.jpg



View of flap gate on WS.

#### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/15/2019 05/15/2019	Makar Sokol

LM Start	22.32	Rating **	М	Issue No.		63	
LM End	22.32	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory						End	
Item	Encroach	ments	s 39.358453 ° 39.35		39.358453 °		
пеш	-121.8750		30°	-121.875030 °			
DWR ID	DWR_MA0	013_02_s _ 201	9_63				
		Comn	nent Cod	le			
TR : Tree	or limb						
		Inspecto	or Comm	nent			
Remove th	ne fallen tre	es along the	landside	slope and	toe.		

No Photos

LM Start	22.33	Rating **	A/W	Issue No.		62	
LM End	22.33	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Slope Sta	bility		39.3584	19°	39.358419°	
iteiii				-121.8750	88 °	-121.875088 °	
DWR ID	DWR_MA0	013_02_s _ 201	6_62				
			. ^				

#### Comment Code

S1 : Repair slope instability.

#### Inspector Comment

Photo 1 of 1 : SP\_2019\_MA0013\_301\_62\_20190327\_00012.jpg



View of slope instability issue along the landside slope.

LM Start	22.58	Rating **	U	Issue No.		61	
LM End	22.58	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Erosion /	Bank Caving		39.356476 °		6° 39.356476	
пеш				-121.879089°		-121.879089	
DWR ID	DWR_MA0013_02_s _ 2019_61						
		Comn	nent Cod	de			
E2 : Schedule repair of erosion site prior to the next inspection.							
Inspector Comment							



View of the erosion at the landside shoulder and slope. Spring 2019.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\*Rating

A: Acceptable M: Not Inspected/Rated M: Minimally Acceptable U: Unacceptable U: Unacceptable M: McCeptable AW: Acceptable but Monitor & Maintain Enforcement

\*\*Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement